

## Building Capacity for Environmental Leadership

**Vision:** Integrated planning in which all plans are infused with sustainability ... Boston National Historic Park is viewed as a model ... Economic sustainability is reached along with environmental sustainability.

Greening Targets	Baseline	Goals		
		Short-Term (0-1 year)	Mid-Term (1-5 years)	Long-Term (5 years +)
Planning	<ul style="list-style-type: none"> <li>Planning is not currently integrated and there is no greening master plan.</li> <li>Plans were developed for all sites except Navy Yard in 1980; plans were revised in 1987 and Navy Yard plan was developed.</li> <li>A Long Range Interpretation Plan was developed in 2002.</li> <li>Five major construction projects are scheduled.</li> </ul>	<ul style="list-style-type: none"> <li>Use EMS as a tool [Ruth and Green Team]</li> <li>Try to obtain funds for EMS development</li> <li>Conduct EMS training as soon as possible</li> <li>Develop policy and goals statements</li> <li>Begin list of products purchased</li> <li>Review guidance from EPA</li> <li>Obtain professional support for planning [Terry and Ruth]</li> <li>Re-activate Green Team [Terry]</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Prepare EMS using NPS EMS guidance when released; follow up on EMS training</li> <li>Prepare a business plan for the park to include public-private partnerships, leaseable space, marketing, opportunities [Terry]</li> </ul>	<ul style="list-style-type: none"> <li>Update the GMP with sustainability as an integral component (use true sustainability as one of the alternative scenarios in the EIS)</li> <li>Begin to think about social sustainability for the Navy Yard community, including healthy lifestyles, cultural events to bring people to the area</li> </ul>
Audits	<ul style="list-style-type: none"> <li>An audit has been conducted.</li> </ul>			
Training and Education	<ul style="list-style-type: none"> <li>A sustainability and security charrette was held last year.</li> </ul>	<ul style="list-style-type: none"> <li>Communicate charrette results to staff and partners [Terry and Dave]</li> <li>Conduct charrettes for staff and partners [division chiefs]</li> </ul>	<ul style="list-style-type: none"> <li>Conduct partner/site charrettes [division chiefs]</li> </ul>	
<b>Cross-Cutting Goals</b>				
Education/ Interpretation		<ul style="list-style-type: none"> <li>Consider a public relations event to highlight sustainability at the Navy Yard</li> </ul>		
Training Needs				
Procurement				

## Transportation

<b>Vision:</b> Coherent and easily understandable network to maximize visitors' use of public transportation ... Park vehicle fleet that meets needs and minimizes fossil fuel use and CO2 emissions ... Park vehicle fleet O&M that is as green as possible.				
Greening Targets	Baseline	Goals		
		Short-Term (0-1 year)	Mid-Term (1-5 years)	Long-Term (5 years +)
Visitor transport	<ul style="list-style-type: none"> <li>Public transportation reaches some park locations but not the Navy Yard</li> <li>The Mass Bay Coalition is working on a transportation plan for the region; park staff participate.</li> <li>There is limited parking at the Navy Yard and other downtown sites; reduced rate parking at the Navy Yard is not well-publicized.</li> <li>Tour bus parking has been restricted for security reasons</li> <li>No shuttles are run by the park, all are private.</li> <li>Signage on roads is bad.</li> <li>Joint tickets do not include shuttles.</li> <li>Brochures and Web site do not provide adequate information on public transportation options</li> </ul>	<ul style="list-style-type: none"> <li>Review brochures and Web sites to make sure they include information on public transportation options [Interpretation staff]</li> <li>Work with Freedom Trail Trolley to optimize sustainability – close the loop for walkers, include trolley in one-ticket system, connect to public transportation [Ruth, Bill Foley]</li> <li>Continue to work with the Mass Bay Coalition including bike lanes, harbor boat connections, trolleys and shuttles to connect transport with park</li> </ul>	<ul style="list-style-type: none"> <li>Improve signage to guide visitors to the Navy Yard</li> <li>Incorporate sustainable strategies and incentives in resolving tour bus parking issues               <ul style="list-style-type: none"> <li>Provide preferential parking for alt fuel buses</li> </ul> </li> <li>Shade parking lot</li> <li>Use paving the reduces runoff</li> <li>Mitigate runoff</li> <li>Continue to work with Mass Bay Coalition</li> <li>Continue to work on visitor shuttle issues and watch Adams National Historic Site experience</li> </ul>	
Vehicle fleet/ alternative fuels	<ul style="list-style-type: none"> <li>There are now 2 electric vehicles with 10 more arriving soon; 5-6 gasoline powered cars; 7-8 gasoline powered pickup trucks; 1 diesel truck; no bicycles except for a few ranger patrols</li> <li>There is no on-site filling station; there is on-site maintenance; natural gas and biodiesel filling stations are available in the region.</li> </ul>	<ul style="list-style-type: none"> <li>“Right size” the fleet – how should electric vehicles be used? What vehicles can be eliminated or replaced by electric vehicles or bicycles? Eliminate GSA leased gasoline or diesel vehicles and replace with electric or green leases [Dave, Gene, Pat, rangers, Volpe]</li> <li>Install bike racks as part of installation of security structures [protective rangers]</li> </ul>	<ul style="list-style-type: none"> <li>Look at renewable energy sources for electric vehicle recharge</li> <li>Meet all departmental requirements for fleet [grounds crew, auto maintenance, facility manager with help from Cape Cod National Seashore]</li> <li>Obtain more alternative fuel vehicles, including the visible employee shuttle</li> <li>Prepare a Fleet Management Plan</li> </ul>	

	<ul style="list-style-type: none"> <li>• An employee shuttle/ minivan runs between the Navy Yard and downtown administrative offices; there is a state program to furnish alternative fuel vans, fuel, insurance – park must provide the driver</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a list of transportation requirements [Willie]</li> <li>• Use biolubricants [grounds crew, auto maintenance with help from Cape Cod]</li> <li>• Research options for employee shuttle between Navy Yard and downtown offices – green lease or Mass Caravan program [park administrative staff]</li> </ul>	after DOI Policy and Plan are issued in Summer 2002 and use Cape Cod plan as an example	
<b>Cross-Cutting Goals</b>				
Education / Interpretation		<ul style="list-style-type: none"> <li>• Investigate demonstration charging station that uses renewable energy for at least one electric vehicle</li> <li>• Develop “take home” messages about transportation such as amount of CO2 saved by walking Freedom Trail [Interpretation staff]</li> <li>• Link to K-12 education programs [Sheila Cook-Kayser]</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct a special event showcasing sustainable transportation such as a “bike in” or alternative vehicle show on the pier</li> </ul>	<ul style="list-style-type: none"> <li>• Achieve 100% vehicles run on renewable fuels</li> </ul>
Training Needs				
Procurement		<ul style="list-style-type: none"> <li>• See above on vehicle lease/purchase</li> </ul>	<ul style="list-style-type: none"> <li>• See above on vehicle lease/purchase</li> </ul>	<ul style="list-style-type: none"> <li>• See above on vehicle lease/purchase</li> </ul>

## Facilities

<b>Vision:</b> Economic sustainability ... Improved functionality (campus concept) ... Showcase a comprehensive project such as Building 5 Visitor Center				
Greening Targets	Baseline	Goals		
		Short-Term (0-1 year)	Mid-Term (1-5 years)	Long-Term (5 years +)
Green Process/ Facilities	<ul style="list-style-type: none"> <li>5 construction projects are scheduled including new Visitor Center in Building 5</li> <li>Piecemeal funding is a major barrier</li> </ul>	<ul style="list-style-type: none"> <li>Develop park SOPs for planning, design, procurement, and products [Ruth and Procurement Office]</li> <li>Gather baseline on inventory – utilities, stormwater collection, sanitary system, electricity [Gene and Pat Laffey]</li> <li>Develop a strategic campus plan for Navy Yard [Terry]</li> <li>Develop a comprehensive energy management/conservation plan [Gene, Pete, and Dave] <b>Pete isn't on list – get last name</b></li> <li>Develop business management plan [Terry, Dave, Pete, consultant]</li> </ul>	<ul style="list-style-type: none"> <li>Pilot a complete sustainable project</li> <li>Implement a stormwater management program including rainwater collection and bioretention/ bioremediation</li> <li>Implement a business plan that includes more favorable terms with partners, creation of new partners, funds generated go to sustainable initiatives, a Friends group that focuses on sustainability</li> <li>Implement alternative energy initiatives including interpretation of these initiatives; consider ground source heat pumps, wind, tides (longer term), co-generation, etc.</li> <li>Prepare a detailed master plan with priorities</li> <li>Ensure accommodation for alternative transportation such as bike racks, recharge stations</li> </ul>	<ul style="list-style-type: none"> <li>Use the Navy Yard as a model for cleanup of ground and harbor</li> <li>Fully implement bioretention and bioremediation</li> <li>Create a green landscape</li> <li>Achieve economic sustainability – all projects are revenue neutral or positive</li> <li>Optimize revenue stream from available assets</li> <li>Optimize O&amp;M revenue</li> <li>Upgrade all buildings to minimize operating costs</li> </ul>
LEED	<ul style="list-style-type: none"> <li>No LEED-certified buildings</li> </ul>			<ul style="list-style-type: none"> <li>LEED certify all buildings to the extent possible</li> </ul>
<b>Cross-Cutting Goals</b>				
Education/ Interpretation				<ul style="list-style-type: none"> <li>Integrate all sustainability efforts into interpretation</li> </ul>
Training Needs				

Procurement		<ul style="list-style-type: none"><li>• Develop boilerplate criteria for RFPs, RFQs, etc. using existing models from GSA, Navy, DSC (Ruth. Bill Barlow, Marcy)</li></ul>		
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## Operations and Maintenance

<b>Vision:</b> Maintenance becomes a proactive rather than reactive division ... Park maintenance optimizes resources use by minimizing waste, conserving energy and water, eliminating toxins, using recycled, renewable and green products and materials ... Green O&M is interpreted and shared broadly ... Staff level is adequate to enable success.				
Greening Targets	Baseline	Goals		
		Short-Term (0-1 year)	Mid-Term (1-5 years)	Long-Term (5 years +)
Overall			<ul style="list-style-type: none"> <li>Develop a cyclic maintenance and prevention program</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate progress and success</li> <li>Document activities</li> </ul>
Landscaping	<ul style="list-style-type: none"> <li>Native plants – plant inventory</li> <li>Use IPM practices</li> <li>Looking into rainwater for irrigation</li> </ul>	<ul style="list-style-type: none"> <li>Get state certification for IPM Coordinator [Jimmy Gardiner]</li> </ul>		
Hazardous Waste	<ul style="list-style-type: none"> <li>Are addressing audit findings</li> <li>Have removed all refrigerants, paints, metals, air conditioners, refrigerators, creosote timbers</li> <li>Have reduced quantities of paints, chemicals when purchasing</li> </ul>	<ul style="list-style-type: none"> <li>Review the audit results with staff and get training and buy-in; assign responsibilities (Gene)</li> </ul>		
Solid Waste	<ul style="list-style-type: none"> <li>2 recycle containers</li> </ul>	<ul style="list-style-type: none"> <li>Develop a comprehensive recycling program</li> </ul>	<ul style="list-style-type: none"> <li>Develop a waste management program including a recycling plan</li> </ul>	<ul style="list-style-type: none"> <li>Update plan</li> </ul>
Water	<ul style="list-style-type: none"> <li>Use 13.1 million gallons annually</li> </ul>	<ul style="list-style-type: none"> <li>Begin planning to collect rainwater for irrigation [Gene]</li> <li>Collect water data annually</li> <li>Determine stormwater permit needs</li> <li>Consider stormwater run-off issues [Gene]</li> </ul>	<ul style="list-style-type: none"> <li>Develop a stormwater and rainwater collection plan</li> </ul>	<ul style="list-style-type: none"> <li>Update plan</li> </ul>
Energy		<ul style="list-style-type: none"> <li>Develop relationship with ESPC “Select Energy” for retrofits, etc.</li> <li>Prepare an energy management/ conservation/ retrofit plan – use local GSA expertise</li> <li>Work with interpretation on energy messages</li> <li>Gather drawings and plans for utilities</li> </ul>	<ul style="list-style-type: none"> <li>Develop an energy management plan</li> </ul>	<ul style="list-style-type: none"> <li>Update plan</li> </ul>

		to prepare a comprehensive overview		
Janitorial Services	<ul style="list-style-type: none"> <li>• Use green products</li> </ul>	<ul style="list-style-type: none"> <li>• Investigate new products, in addition to greener products now in use, and learn from other parks' successes</li> <li>• Troubleshoot problems (e.g., waterless urinals)</li> <li>• Train staff on new products and processes</li> </ul>		
Building O&M				
Vehicle Fleet O&M	<ul style="list-style-type: none"> <li>• Stop washing park vehicles in maintenance shop</li> <li>• Introducing electric vehicles into fleet</li> </ul>			
<b>Cross-Cutting Goals</b>				
Education/ Interpretation		<ul style="list-style-type: none"> <li>• See energy above</li> </ul>		<ul style="list-style-type: none"> <li>• Interpret sustainability</li> </ul>
Training Needs		<ul style="list-style-type: none"> <li>• See janitorial services above</li> </ul>		
Procurement				

## Interpretation and Education

<b>Vision:</b> Visitors and staff are motivated by an understanding of the use of resources (energy, waste, water, etc.) through history and how decisions we make today affect the future. <b>Messages</b> <ul style="list-style-type: none"> <li>- Environmental and economic benefits of sustainability</li> <li>- We are part of history and the future</li> <li>- Our daily decisions affect the future (The natural world,...)</li> <li>- "Freedom" as energy independence (from energy dependence)</li> <li>- Declaration of Energy Dependence or Independence? (from non-renewables)</li> </ul>				
Greening Targets	Baseline	Goals		
		Short-Term (0-1 year)	Mid-Term (1-5 years)	Long-Term (5 years +)
Overall	<ul style="list-style-type: none"> <li>• Not really doing anything to educate the public about greening activities</li> <li>• Interpreters do not know enough about what other divisions are doing</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct historical research on energy use, waste, resource use, materials at the Navy Yard [Bill Foley]</li> <li>• Design a logo for sustainability at BHP to use in waysides, on vehicles, etc. – run a contest to allow school children to design the logo</li> <li>• Identify partners and interns to participate in efforts, including historical research</li> <li>• Highlight 2 greening activities – harbor cleanup and electric vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate achievements of first year</li> <li>• Prepare an exhibit on the use of resources through history for the Visitor Center</li> <li>• Develop education programs with other area parks</li> <li>• Develop a “clean trail” along the Freedom Trail highlighting sustainability initiatives using the logo; involve partners along the Trail</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate and refine the program</li> <li>• Make the Freedom Trail free of non-renewables</li> <li>• Tell the story of the greening effort</li> <li>• Create messages for visitors on what they can do at home</li> <li>• Conduct a visibility campaign on television</li> <li>• Win or at least apply for a Closing the Circle award</li> </ul>
Messages and Methods – Leadership		<ul style="list-style-type: none"> <li>• Demonstrate ongoing management support [Terry, Dave, Bill Foley]</li> </ul>	<ul style="list-style-type: none"> <li>• Review Interpretation Plan and weave sustainability into existing programs</li> </ul>	
Messages and Methods – Planning				
Messages and Methods – Transportation		<ul style="list-style-type: none"> <li>• Place logo and signs on electric and other alternative fuel vehicles</li> <li>• Investigate use of wind power for at least one electric vehicle charging station and interpret</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare an exhibit on electric vehicles</li> </ul>	



Messages and Methods – Facilities		<ul style="list-style-type: none"> <li>• Work on Building 5 renovation to green the scope and for exhibits</li> </ul>		
Messages and Methods – O&M				
Messages and Methods – Concessions				
Messages and Methods – Procurement				
<b>Cross-Cutting Goals</b>				
Education/ Interpretation		<ul style="list-style-type: none"> <li>• Conduct staff education and training charrette including audit results and green survey [Gene and Marcy]</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct tailgates and other staff training sessions</li> <li>• Weave sustainability into the Teacher Resource Workshop</li> </ul>	
Training Needs				
Procurement				